

1. A voice coding method based on analysis-by-synthesis vector quantization using a code book containing a voice source code vector having only a plurality of non-zero amplitude values, comprising the step of

variably controlling a position of a sample of the non-zero amplitude value using an index and a transmission parameter indicating a feature amount of voice.

2. The method according to claim 1, further comprising the step of

variably controlling the position of the sample of the non-zero amplitude value using the index and a lag value corresponding to a pitch period which is a transmission parameter indicating the feature amount of voice.

3. The method according to claim 2, further comprising the step of

reconstructing the position of the sample of the non-zero amplitude value within a region corresponding to the lag value depending on a relationship between

[illegible]

5

10

15

20

25

reconstructing the position of the sample of the non-zero amplitude value within a region corresponding to the lag value depending on the pitch gain value.

5

10

15

20

25

reconstructing the position of the sample of the non-zero amplitude value within a region corresponding to the lag value depending on a relationship between the lag value and a frame length which is a coding

of the vo

The meth

ising the

variably

e non-zero

value co

nsmission

ice and a

The meth

ising the

reconstru

ero ampli

e lag val

ag value

of the vo

The meth

ising the

reconstru

ero ampli

e lag val

A voice c

5

10

15

20

25

13. A voice coding apparatus based on analysis-by-

THE UNIVERSITY OF CHICAGO

5 controlling a position of a sample of the non-zero
amplitude value using an index and a transmission
parameter indicating a feature amount of voice.

10 said configuration variable code book unit
variably controls the position of the sample of the
non-zero amplitude value using the index and a lag
value corresponding to a pitch period which is a
transmission parameter indicating the feature amount
15 of voice.

said configuration variable code book unit
variably controls the position of the sample of the
20 non-zero amplitude value using the index and a lag
value corresponding to a pitch period which is a
transmission parameter indicating the feature amount
of voice and a pitch gain value.

25 16. A voice decoding apparatus for decoding a voice

5 a configuration variable code book unit variably
controlling a position of a sample of the non-zero
amplitude value using an index and a transmission
parameter indicating a feature amount of voice.

18. The apparatus according to claim 16, wherein
said configuration variable code book unit
20 variably controls the position of the sample of the
non-zero amplitude value using the index and a lag
value corresponding to a pitch period which is a
transmission parameter indicating the feature amount
of voice and a pitch gain value.